ATTENTION:
GENERAL MANAGER ❑
PARTS MANAGER ❑
CLAIMS PERSONNEL ❑
SERVICE MANAGER ❑

IMPORTANT - All Service Personnel Should Read and Initial in the boxes provided, right.

SUBARU

QUALITY DRIVEN® SERVICE

SERVICE INFORMATION BULLETIN

APPLICABILITY: 2022MY BRZ
2023MY Outback & Legacy
2023MY Ascent
2024MY Crosstrek & Impreza

NUMBER: 14-28-21R
DATE: 11/19/21
REVISED: 07/08/24

SUBJECT: New Software Reprogramming Procedures / SSM5-R

INTRODUCTION:

This Service Information Bulletin announces the new control module software reprogramming procedures. Subaru Select Monitor 5-R is the only application available for future new models. Subaru Select Monitor 4 can still be used for DTC check and data analysis. The information below provides the necessary steps to perform software reprogramming using SSM5-R.

SSM5-R Features:

- Web Based Reprograming
- Vehicle specific
- Identifies equipped and non-equipped control modules
- Identifies the availability of new software
- Software changes are tracked by VIN within the cloud server
- Identifies only those control modules having available .pfc files. SSM5-R uses .pfc files, similar to how Flashwrite2 uses .pak & .pk2 files.

SERVICE PROCEDURE / INFORMATION:

REMINDER: Customer satisfaction and retention starts with performing quality repairs.

STEP 1) Using a DCA-8000, input the battery information and set the charger to Power Supply Mode.

STEP 2) Access Subaru Select Monitor 5 by clicking the Cloud Connector icon (shown below) found on the GUI of an SDS Toughbook or through the Reprogram menu on SSM4.

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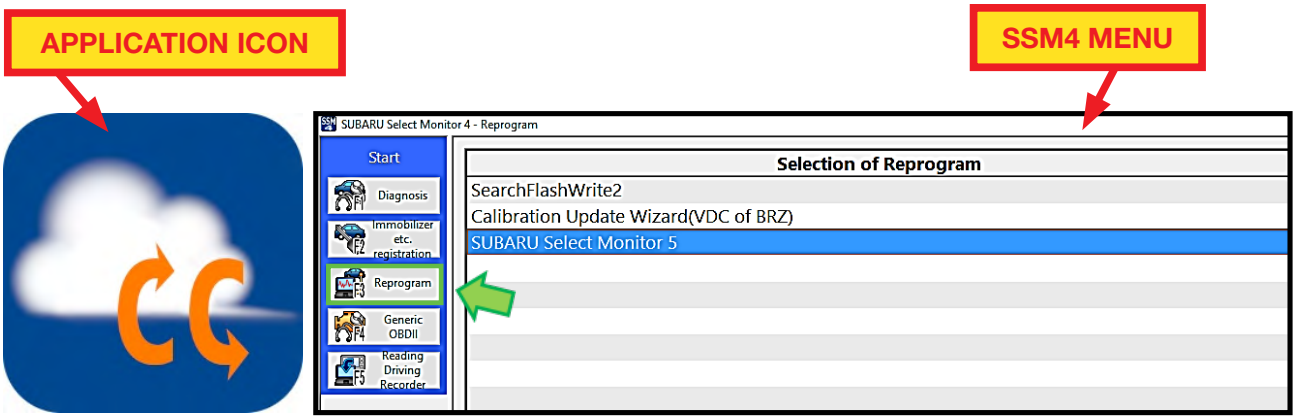
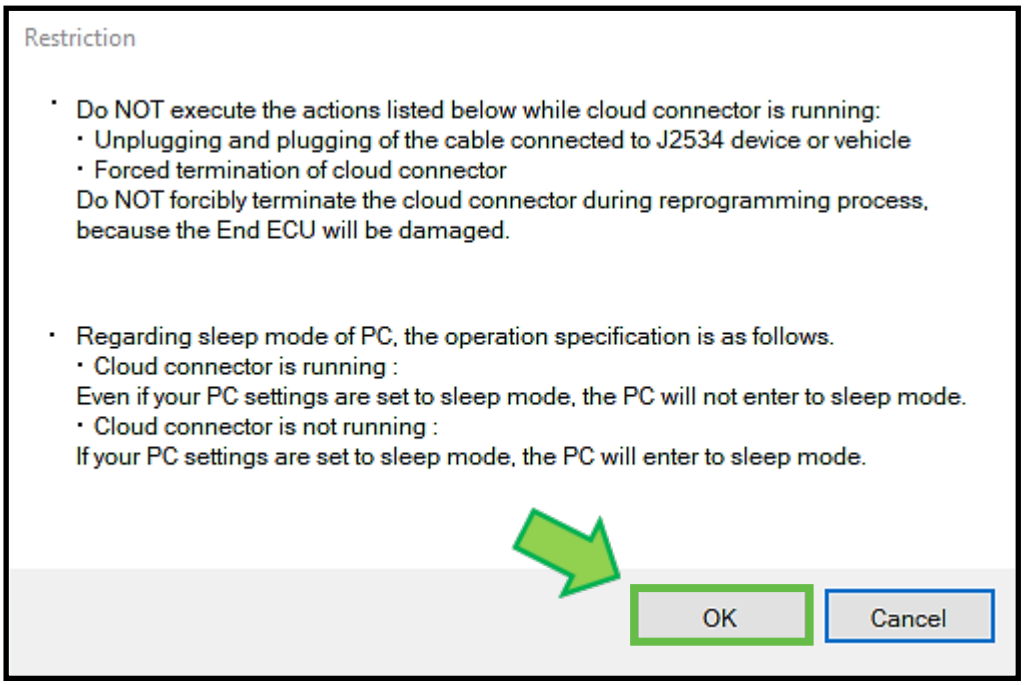


STEP 3) When the Cloud Connector is opened, it will first perform a self-check for any operating software updates and automatically install them. The restriction warning shown below will be displayed.

STEP 4) It is **IMPORTANT** to read all warnings as failure to do so may result in damage to any targeted control module(s). Click the "OK" button to continue.



STEP 5) With the Cloud Connector application shown below open, click "ID Copy" to copy the Cloud Connector Identification number to memory. Confirm the Interface Device (e.g., DST-i) is connected to the laptop and vehicle ignition is ON.

A. Select the correct Interface (J2534) device from the drop-down (**A**) box.

B. Click on the "Cloud connect" (**B**) button. This will link the vehicle via the interface along with the Cloud Connector application to the server.

C. Once the connection is made, a confirmation (**C**) will be displayed. Click "OK". The connection status will change to "connected."

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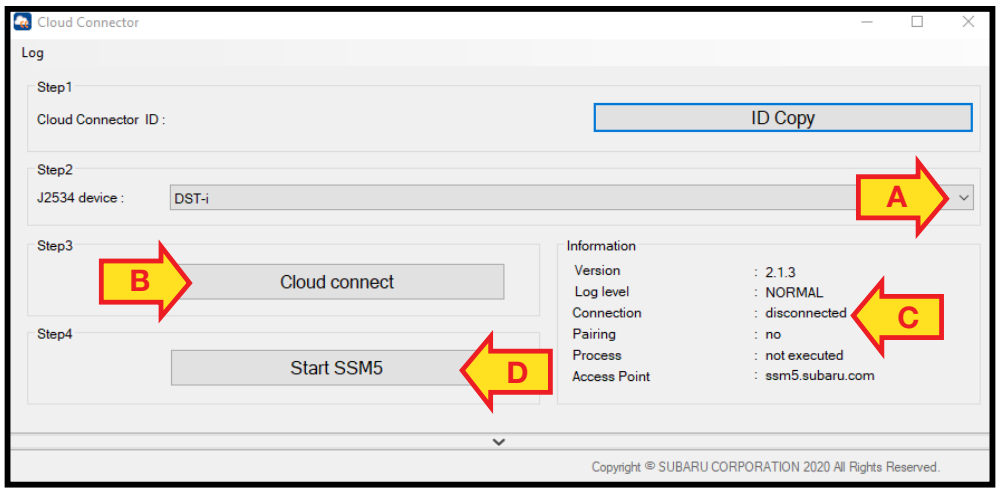
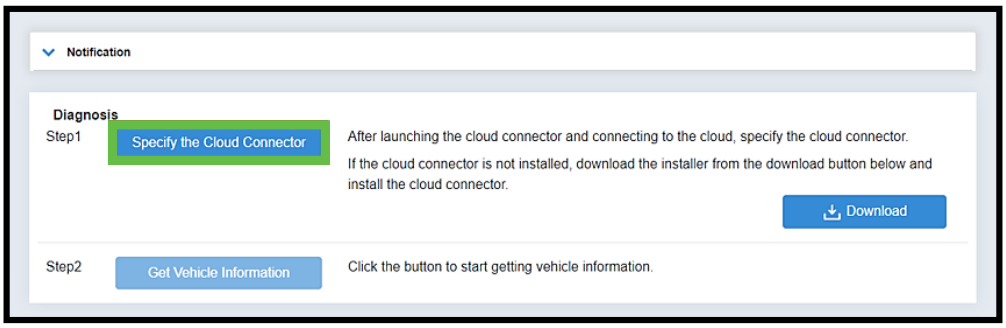
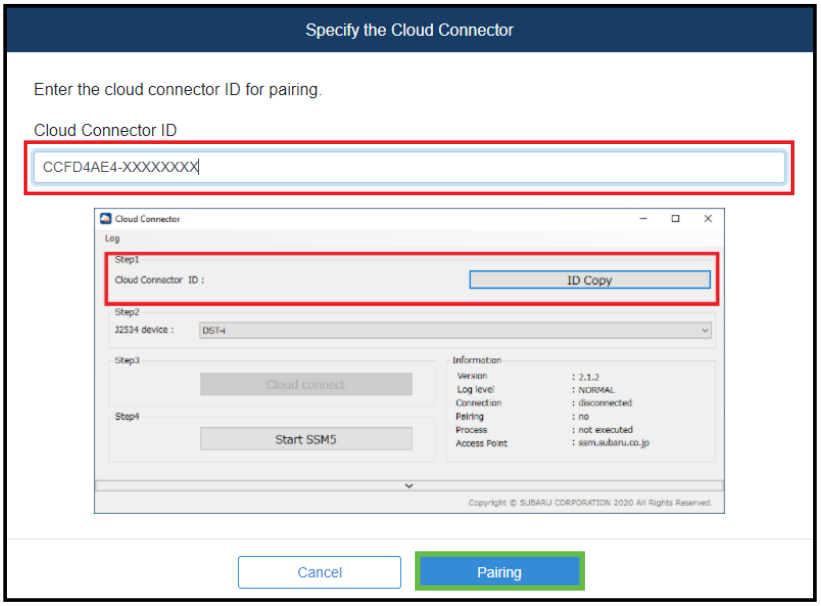
D. CLICK the "Start SSM5" button (**D**). The SSM5 web page will open once the user is prompted to login using their single sign on (SSO) credentials.



STEP 6) With the web page open, click on the "Specify the Cloud Connector" button. A Pop-up will appear.



STEP 7) Right click inside the "Cloud Connector ID" box and paste the CC ID that was copied in **STEP 5**. When the identification number is pasted, the "Pairing" button becomes active. Click the "Pairing" button. A pop-up window will appear confirming the web page has been linked to the vehicle via the Cloud Connector. Click "OK". The user will be redirected back to the SSM5 web page.



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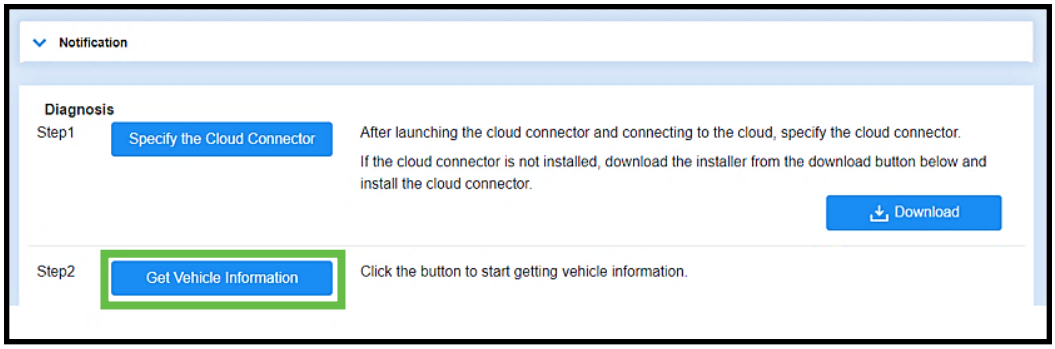
STEP 8) Click the "Get Vehicle Information" button. Communication with the vehicle will be established and the Vehicle Information page will appear.



STEP 9)

A. As shown below, the upper right corner (**A**) will display the VIN, System Voltage, Model, and Model Year.

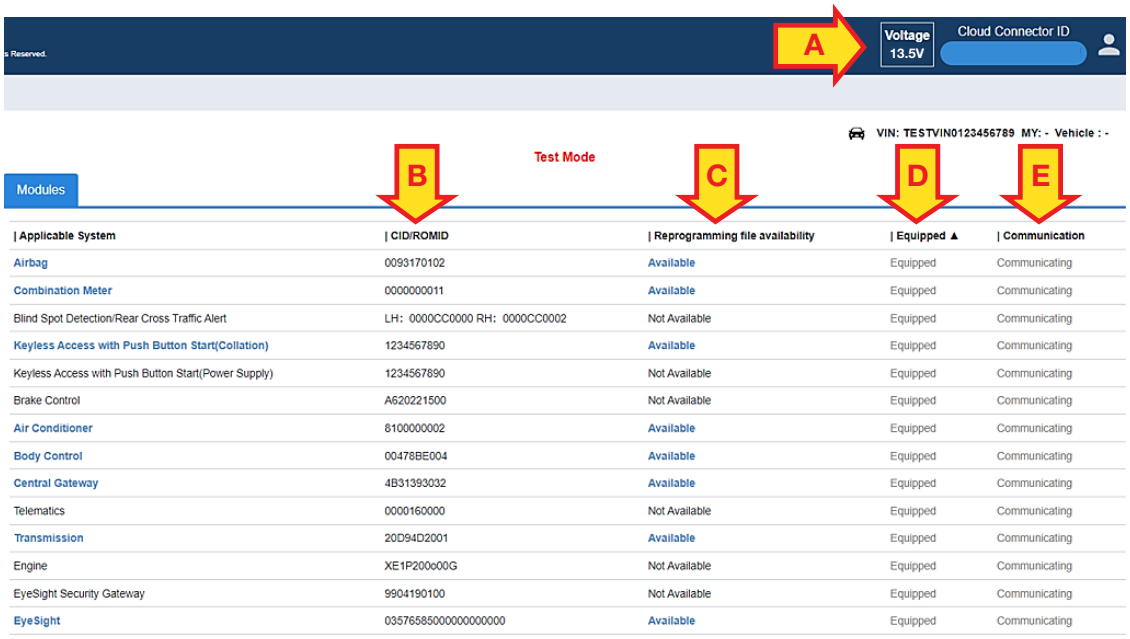
B. The current CID / ROMID is listed in the second column (**B**).

C. All the control modules with software eligible for update will be identified under the "Reprogramming file availability" column (**C**).

D. Control modules present in the vehicle will be listed in the 4th column. "Equipped" (**D**) means the control module should be present in the vehicle. "Not Equipped" means the control module is not present in the vehicle.

E. Control module communication status is indicated in the 5th column (**E**).

IMPORTANT: If a control module is indicated as "Equipped" but is not communicating, the communication issue should be addressed first before proceeding further.



Applicable System	CID/ROMID	Reprogramming file availability	Equipped ▲	Communication
Airbag	0093170102	Available	Equipped	Communicating
Combination Meter	0000000011	Available	Equipped	Communicating
Blind Spot Detection/Rear Cross Traffic Alert	LH: 0000CC0000 RH: 0000CC0002	Not Available	Equipped	Communicating
Keyless Access with Push Button Start(Collation)	1234567890	Available	Equipped	Communicating
Keyless Access with Push Button Start(Power Supply)	1234567890	Not Available	Equipped	Communicating
Brake Control	A620221500	Not Available	Equipped	Communicating
Air Conditioner	8100000002	Available	Equipped	Communicating
Body Control	00478BE004	Available	Equipped	Communicating
Central Gateway	4B31393032	Available	Equipped	Communicating
Telematics	0000160000	Not Available	Equipped	Communicating
Transmission	20D94D2001	Available	Equipped	Communicating
Engine	XE1P200o00G	Not Available	Equipped	Communicating
EyeSight Security Gateway	9904190100	Not Available	Equipped	Communicating
EyeSight	03576585000000000000	Available	Equipped	Communicating

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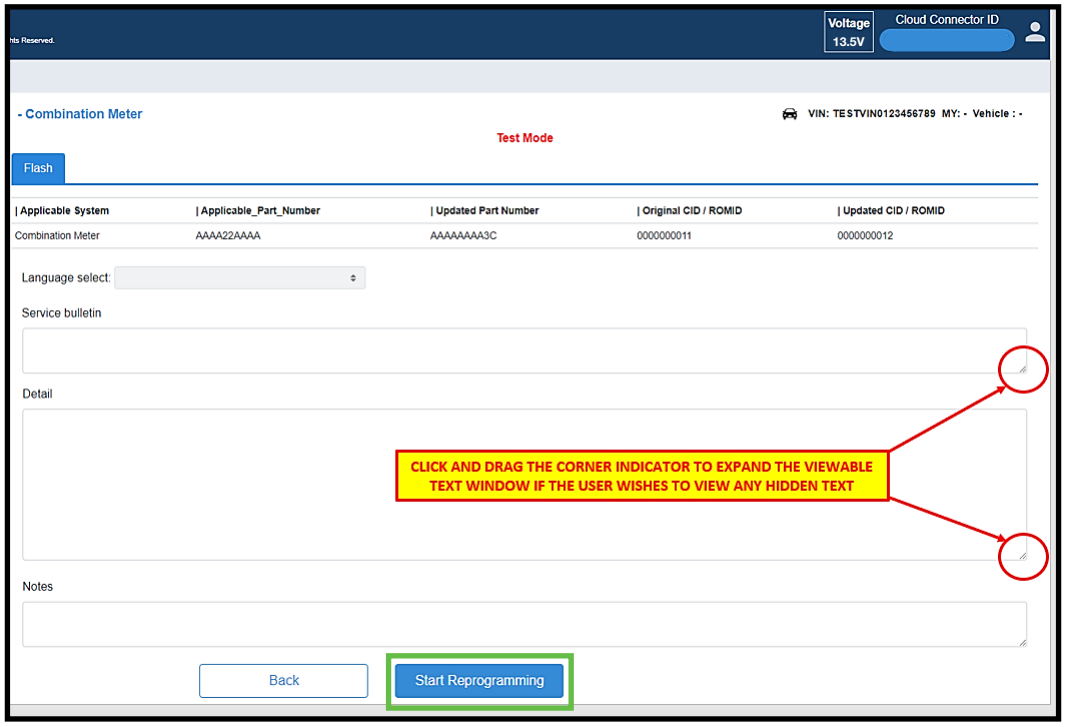
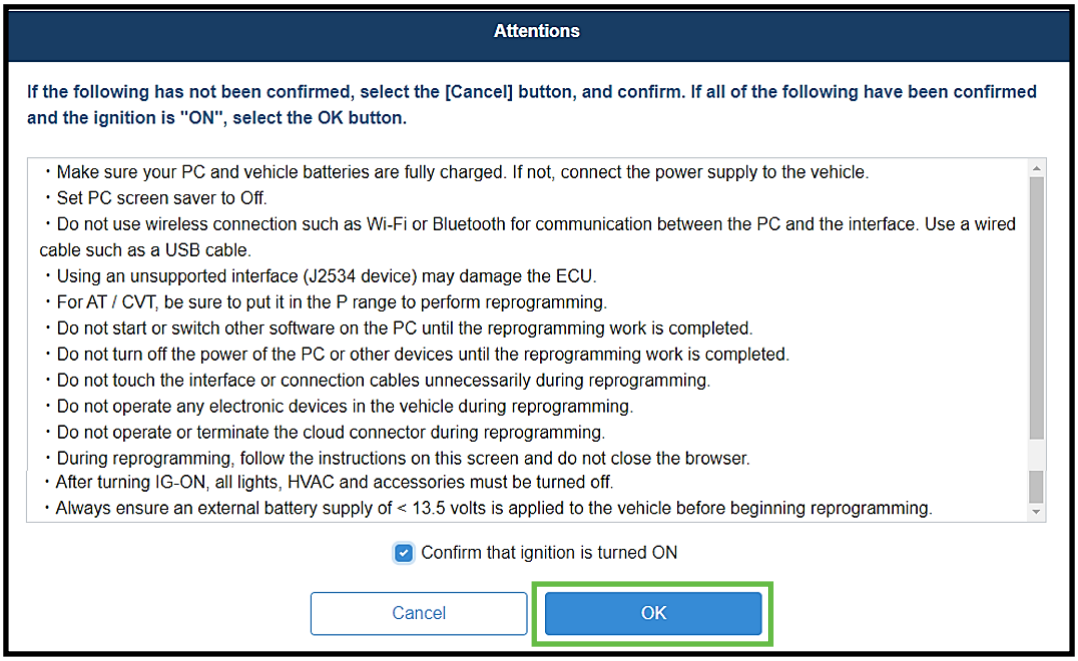
STEP 10) Any control modules with available software for updates will be indicated in the 3rd column as well as the module name and status listed in **Bold/Blue** text. Click on a line showing reprogramming as "Available" to update the selected control module.

STEP 11) The System page will show the update information, any relevant TSB and/or other information. Proceed by clicking the "Start Reprogramming" button.



STEP 12) Review the listed precautions, confirm the ignition is in the "ON" position . Using the gear selector, put the vehicle in the Neutral position and turn on the Electronic Parking Brake. Proceed by clicking "OK".



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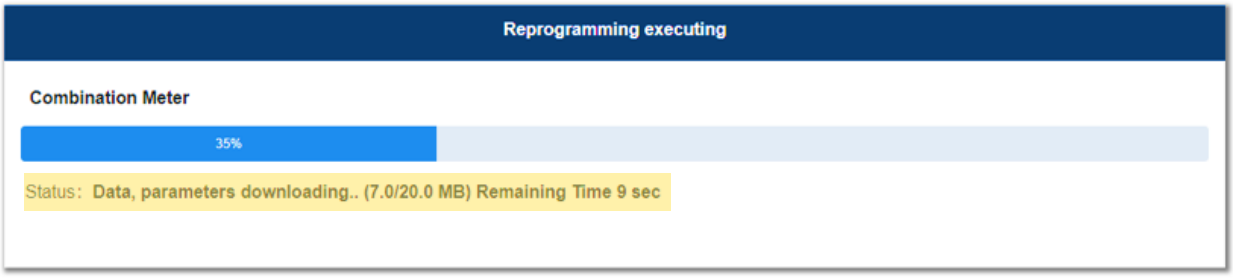
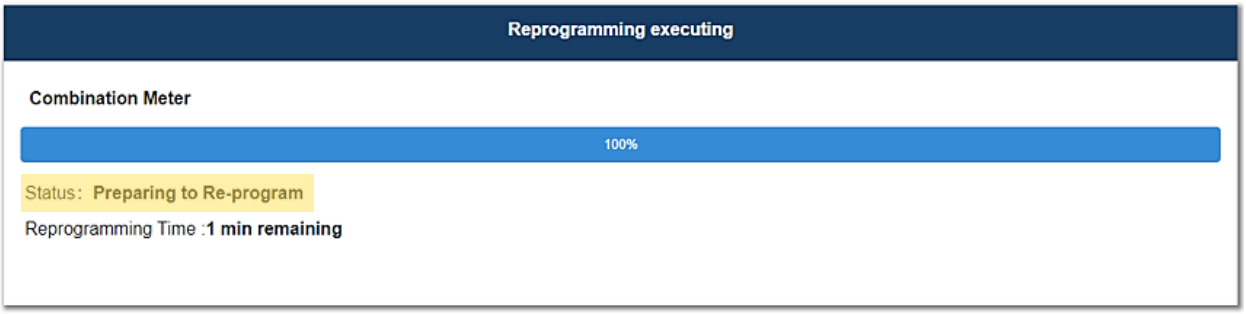
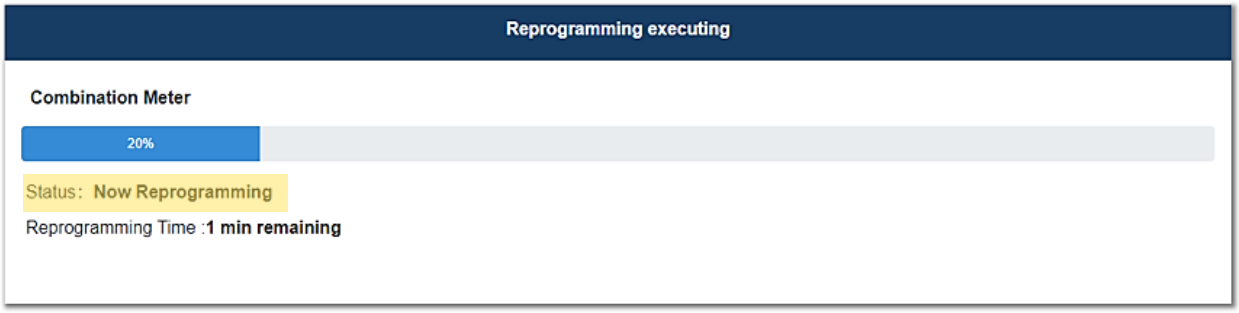
STEP 13) Reprogramming will now start. **NEVER disrupt or close the web page or the Cloud Connector, disconnect any cables, power off the interface, or disturb the process in anyway during the reprogramming process.** During this step, the .pfc file will be retrieved from the cloud server.



STEP 14) Once the .pfc file is obtained, the control module is made ready to accept the reprogram.



STEP 15) Once the control module is fully prepared, the reprogramming will begin. It may take some time to complete this process depending on the size of the .pfc file. Patience is key!



STEP 16) When the reprogramming has completed, the user MUST confirm the ignition is in the "OFF" position. Once confirmed, proceed by clicking "OK."

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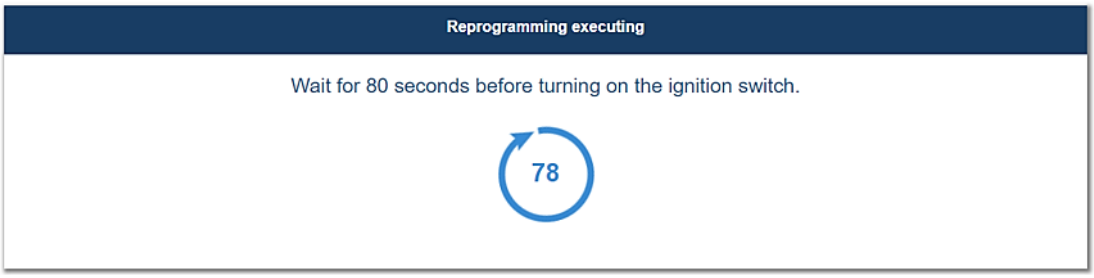
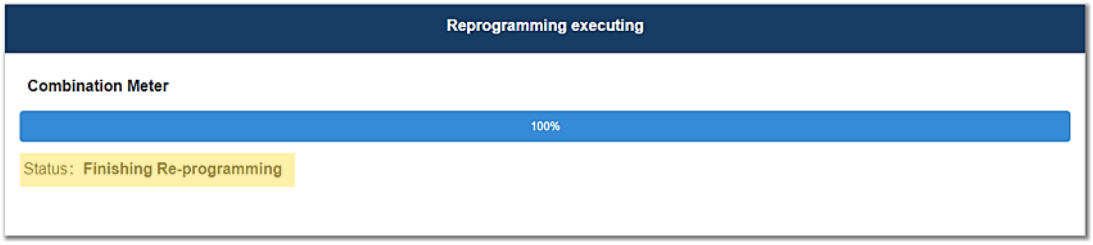
STEP 17) Next, a timer will appear. The amount of time may vary depending on the control module and .pfc file size. This step allows the file information to be saved in the permanent memory of the control module being reprogrammed.



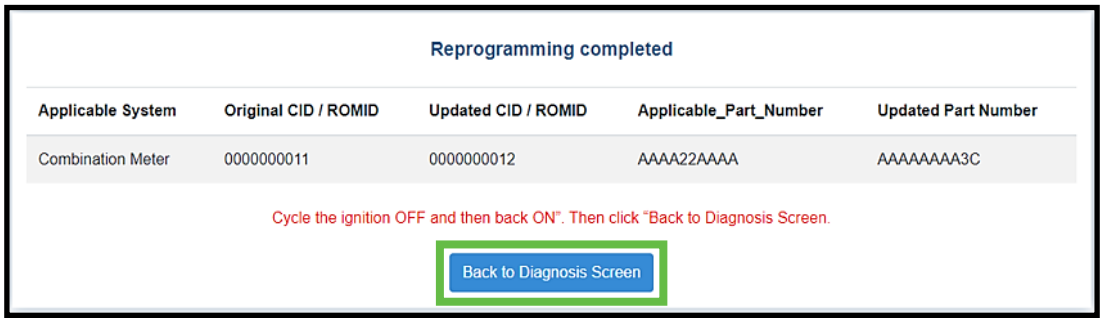
STEP 18) When the timer has reached zero, a new pop-up window will appear. Confirm the ignition in the "ON" position by checking the box and clicking "OK".

STEP 19) In this step, the control module is confirming the NEW information back to the cloud server. **It MUST be allowed the necessary time to complete**. Patience is key!



STEP 20) The verification page displays the Previous (Original) and New (Updated) CID / ROMID as well as the Applicable and Updated part numbers. Cycle the ignition "OFF" and back "ON" to update the "Vehicle" web page. Proceed by clicking the "Back to Diagnosis Screen" button to return.

NOTE: It is recommended the user print this page and store a copy with the Repair Order as confirmation of the update for warranty purposes.



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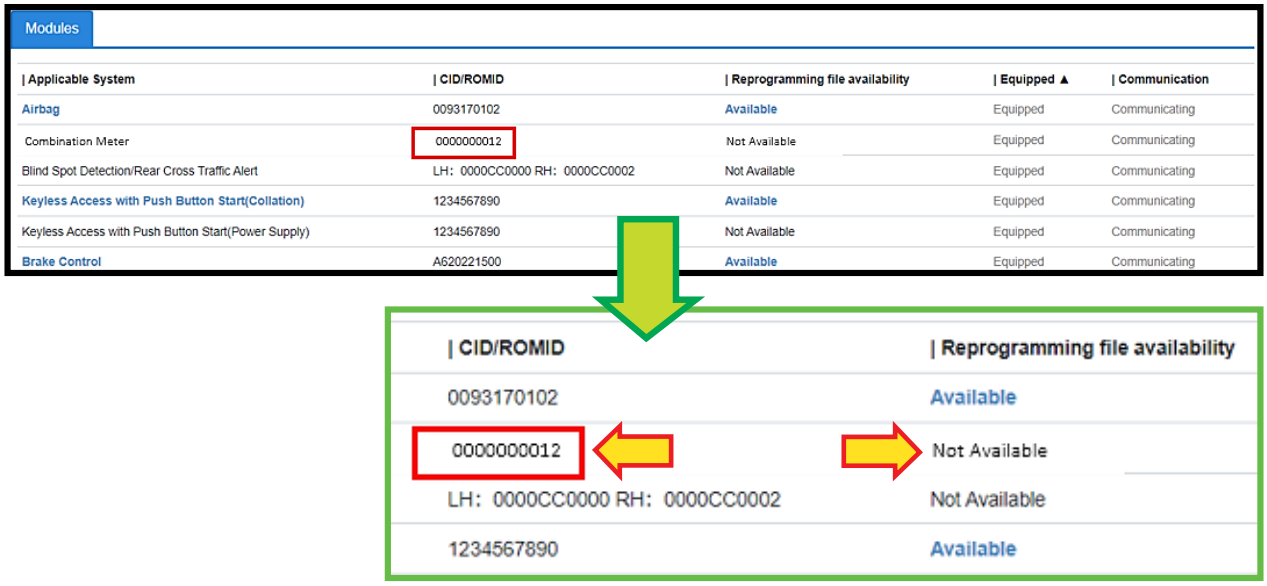
STEP 21) The updated CID/ROMID is now shown on the vehicle page and the updated control module is no longer highlighted. The reprogramming procedure is now complete.



STEP 22) Once the updated CID/ROMID is visible on the Vehicle page and no other updates are to be performed, the user must first close BOTH the SSM5 web browser page first and then the Cloud Connector application to ensure the next user is not logged into the current user's account.

NOTES:

- Screen shots were produced using "test mode" for demonstration purposes. Actual vehicle info displayed will be dependent upon the individual vehicle connected.
- As with previous reprogramming procedures, a vehicle power supply of < 13.5 volts is always required to be connected to the vehicle's 12v battery when reprogramming vehicle control modules.
- Reprogramming of any vehicle control module will not begin until the entire .pfc file is downloaded to the laptop.
- Once downloaded from the cloud, the reprogramming will begin. It is **VERY IMPORTANT** for the cloud connector, web page and any connected interface or cables to **NOT** be closed, turned off, otherwise disturbed, or disconnected until the entire process is complete.
- If a disruption does occur during reprogramming, it is possible (in some situations) to recover the control module depending on when in the process the disruption occurred. Recovery consists of correcting the cause of the disruption and restarting the reprogramming procedure from the beginning.
- Once reprogramming is completed, the .pfc file will be deleted from the computer's storage area (HDD).

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WARRANTY / CLAIM INFORMATION:

There have been no changes made to the Warranty Labor Time Guide for this procedure.

IMPORTANT REMINDERS:

- SOA strongly discourages the printing and/or local storage of service information as previously released information and electronic publications may be updated at any time.
- Always check for any open recalls or campaigns anytime a vehicle is in for servicing.
- Always refer to STIS for the latest service information before performing any repairs.